

Claims

I claim:

1. A filter assembly, comprising:

(a) a housing having an inlet and an outlet; and

5 (b) at least one media disposed within in the housing between the inlet and the outlet;

wherein the filter assembly is adapted to detachably attach to a spray attachment having a spray head and a spray hose assembly having at least one spray hose and a spray hose coupling.

10 2. The filter assembly of Claim 1, wherein the inlet is configured to detachably attach to the spray hose coupling of the spray hose assembly.

3. The filter assembly of Claim 1, wherein the spray attachment further comprises an opening.

15 4. The filter assembly of Claim 3, wherein the outlet is configured to detachably attach to the opening of the spray head.

5. The filter assembly of Claim 3, wherein the opening has a female end and the outlet is configured to detachably attach to the female end.

6. The filter assembly of Claim 1, wherein the spray hose coupling has a male end and the inlet is configured to detachably attach to the male end.

20 7. The filter assembly of Claim 1, wherein the inlet and outlet have threads.

8. The filter assembly of Claim 7, wherein the threads comprise 1/4 inch NSP threads.

9. The filter assembly of Claim 1, wherein the inlet is configured to detachably attach to a hose shank in a faucet assembly.

10. The filter assembly of Claim 1, wherein the inlet is configured to detachably attach to an adapter tee in a faucet assembly.

11. The filter assembly of Claim 1, wherein the outlet is configured to detachably attach to the at least one spray hose.

5 12. The filter assembly of Claim 1, wherein the housing further comprises a filter cartridge having the at least one media.

13. The filter assembly of Claim 1, further comprising an end cap configured to seal the inlet.

10 14. The filter assembly of Claim 13, wherein the end cap further comprises radial ribs configured to direct the flow of water from the inlet.

15. The filter assembly of Claim 12, wherein the housing further comprises a channel extending from the inlet to the filter cartridge.

16. The filter assembly of Claim 12, wherein the filter cartridge further comprises an axial void configured to fluidly communicate with the outlet

15 17. The filter assembly of Claim 1, wherein the at least one media is selected from the group consisting of granulated activated carbon, copper, far infrared, KDF, and ATC.

18. The filter assembly of Claim 1, further comprising at least one pad configured to prevent the media from traveling outside of the housing.

20 19. The filter assembly of Claim 18, wherein the at least one pad further comprises an outlet pad configured to prevent the media from traveling through the outlet.

20. The filter assembly of Claim 18, wherein the at least one pad further comprises an inlet pad configured to prevent the media from traveling through the inlet.

21. The filter assembly of Claim 18, wherein the at least one pad further comprises at least one interior pad.

22. A spray head for a spray attachment, comprising a spray body having an opening, the opening configured to receive a filter assembly having a housing having an inlet and an outlet configured to engage the opening of the spray body.

23. The spray head of Claim 22, wherein the spray body further comprises a female end configured to engage the outlet.

24. The spray head of Claim 22, wherein the spray body further comprises a distal end, a proximal end having the opening, and a cavity extending from the proximal end to at least partially the distal end.

25. The spray head of Claim 24, wherein the cavity is configured to house the filter assembly.

26. The spray head of Claim 24, further comprising a spray spout and a stream spout extending from the distal end of the spray body.

27. The spray head of Claim 26, wherein the spray body further comprises a channel extending from the cavity to the spray spout.

28. The spray head of Claim 26, wherein the spray body further comprises a selector valve having a plurality of positions.

29. A spray attachment, comprising:

(a) a spray head comprising a spray body; and
(b) a filter assembly comprising a housing having an inlet and an outlet, the filter assembly detachably attached to the spray head.

30. The spray attachment of Claim 29, wherein the spray body further comprises a female end configured to engage the outlet.

31. The spray attachment of Claim 29, further comprising a spray hose assembly having a spray hose coupling and at least one spray hose, the spray hose assembly detachably attached to the filter assembly.

32. The spray attachment of Claim 31, wherein the inlet of the filter assembly is configured to engage the spray hose coupling of the spray attachment.

33. The spray attachment of Claim 31, wherein the spray hose coupling further comprises a male end configured to engage the inlet.

34. The spray attachment of Claim 29, wherein the filter assembly further comprises at least one media extending within the housing from the inlet to the outlet.

35. The spray attachment of Claim 34, wherein the media is selected from the group consisting of granulated activated carbon, copper, far infrared, KDF, and ATC.

36. The spray attachment of Claim 34, wherein the filter assembly further comprises:

- (i) a filter cartridge comprising the media;
- (ii) an end cap configured to seal the inlet; and
- (iii) a channel extending between the end cap and the filter

cartridge.

37. The spray attachment of Claim 34, wherein the filter assembly further comprises at least one pad configured to prevent the media from traveling outside of the housing.

38. The spray attachment of Claim 29, wherein the spray head further comprises a stream spout, a spray spout, and a selector valve configured to control the flow of water out of the stream spout and the spray spout.

39. The spray attachment of Claim 38, wherein the at least one spray hose comprises a hot water spray hose having an anterior end and a posterior end and a cold water spray hose having an anterior end and a posterior end.

40. The spray attachment of Claim 39, wherein the posterior end of the hot water spray hose fluidly communicates with the spray spout.

41. The spray attachment of Claim 39, wherein the posterior end of the cold water spray hose fluidly communicates with the filter assembly.

42. The spray attachment of Claim 38, wherein the filter assembly fluidly communicates with the stream spout.

43. The spray attachment of Claim 38, wherein the spray body further comprises a cavity.

44. The spray attachment of Claim 43, wherein the spray body further comprises a channel extending from the cavity to the spray spout.

45. The spray attachment of Claim 39, wherein the spray hose assembly further comprises a manifold configured to direct the flow of water from a hot water supply line to the anterior end of the hot water spray hose and from a cold water supply line to the anterior end of the cold water spray hose.

46. The spray attachment of Claim 45, wherein the manifold further comprises a manifold cavity and a hot water channel.

47. A method of manufacturing a filtered water spray attachment, comprising:

- (a) providing a spray attachment having a spray head and a spray hose assembly;
- (b) providing a filter assembly having a housing having an inlet and an outlet;

- (c) detachably attaching the outlet to the spray head; and
- (d) detachably attaching the inlet to the spray hose assembly.

48. A combination filtered water spray attachment made by the process of:

- (a) providing a spray attachment having a spray head and a spray hose

assembly;

- (b) providing a filter assembly comprising a housing having an inlet

and an outlet;

- (c) detachably attaching the outlet to the spray head; and

- (d) detachably attaching the inlet to the spray hose assembly.

49. A method for filtering water supplied to a spray attachment, comprising:

- (a) supplying water to a spray hose assembly;

- (b) passing the water into a filter assembly comprising a housing

having an inlet and an outlet and at least one media;

- (c) dispersing the water through the at least one media disposed within

the housing;

- (d) removing contaminants from the water by bonding the contaminants

to the media;

- (e) passing the water out of the housing into a spray head having a

nozzle; and

- (f) exiting the water through the nozzle.

50. The method of Claim 49, further comprising passing the water through at least one pad secured within the housing.

51. The method of Claim 49, further comprising killing organisms in the water by reacting the organisms in an oxidation/reduction reaction with the media.

52. The method of Claim 49, wherein passing the water into a filter assembly further comprises directing the flow of the water through radial ribs of an end cap.

53. The method of Claim 52, further comprising directing the flow of the water from the radial ribs to a channel.

5 54. The method of Claim 53, further comprising directing the flow of the water from the channel to a filter cartridge having the media.

55. The method of Claim 54, wherein passing the water out of the housing further comprises directing the flow of water from an axial void in the filter cartridge to the outlet of the filter assembly.

10 56. A method for filtering water supplied to a spray attachment, comprising:

(a) connecting a filter assembly to a water supply;

(b) diverting the water into the filter assembly comprising a housing having an inlet and an outlet and at least one media;

15 (c) dispersing the water through the at least one media disposed within the housing;

(d) removing contaminants from the water by bonding the contaminants to the media;

(e) passing the water out of the housing into a spray attachment having a nozzle; and

20 (f) exiting the water through the nozzle.

57. The method of Claim 56, further comprising passing the water through at least one pad secured within the housing.

58. The method of Claim 56, further comprising eliminating organisms in the water by reacting the organisms in an oxidation/reduction reaction with the media.

59. The method of Claim 56, wherein passing the water into a filter assembly further comprises directing the flow of the water through radial ribs of an end cap.

60. The method of Claim 59, further comprising directing the flow of the water from the radial ribs to a channel.

5 61. The method of Claim 60, further comprising directing the flow of the water from the channel to a filter cartridge having the media.

62. The method of Claim 61, wherein passing the water out of the housing further comprises directing the flow of water from an axial void in the filter cartridge to the outlet of the filter assembly.

10 63. The method of Claim 56, wherein connecting the filter assembly to the faucet assembly further comprises connecting the filter assembly to a coupler tee on the faucet assembly.

15 64. The method of Claim 56, wherein connecting the filter assembly to the faucet assembly further comprises connecting an adapter tee to a water supply line of the faucet assembly.

65. The method of Claim 64, further comprising connecting the filter assembly to the adapter tee.

66. A method of manufacturing a spray attachment, comprising:

- (a) connecting a hot water spray hose to a hot water supply line;
- (b) connecting a cold water spray hose to a cold water supply line;
- (c) detachably attaching a filter assembly to a spray head;
- (d) detachably attaching the hot water spray hose to the spray head;
- (e) detachably attaching the cold water spray hose to the filter assembly; and

(f) providing a selector valve having a plurality of positions.

67. The method of Claim 66, further comprising aligning the hot water spray hose parallel to the cold water spray hose.

68. The method of Claim 67, wherein detachably attaching the hot water spray hose to the spray head further comprises bypassing the filter assembly.

69. The method of Claim 68, further comprising attaching the hot water spray hose to a spray spout.

70. The method of Claim 66, further comprising aligning the hot water spray hose coaxial to the cold water spray hose.

71. The method of Claim 70, further comprising providing a cavity in the spray head.

72. The method of Claim 71, further comprising providing a channel in the spray head extending from the cavity to the spray spout.

73. The method of Claim 70, wherein connecting the hot water spray hose to the hot water supply line and connecting the cold water spray hose to the cold water supply line further comprises connecting the hot water spray hose, the cold water spray hose, the hot water supply line, and the cold water supply line to a manifold.

74. A method of supplying unfiltered water to a spray attachment having a filter assembly, comprising:

- (a) positioning a selector valve to an unfiltered position;
- (b) supplying water to a faucet assembly;
- (c) diverting the water into a spray hose assembly;
- (d) passing the water into a spray head;
- (e) bypassing the filter assembly;

- (f) passing the water to an unfiltered spout; and
- (g) exiting the water through the unfiltered spout.

75. The method of Claim 74, wherein passing the water into the spray head further comprises passing the water into a cavity in the spray head.

5 76. The method of Claim 75, further comprising directing the water from the cavity into a channel.

77. Filtered water made by the process of:

- (a) supplying water to a spray hose assembly;
- (b) passing the water into a filter assembly;
- (c) passing the water out of the filter assembly into a spray head having a nozzle; and
- (f) exiting the water through the nozzle.

78. Filtered water made by the process of Claim 77, further comprising dispersing the water through at least one media disposed within the filter assembly.

15 79. Filtered water made by the process of Claim 78, further comprising removing contaminants from the water by bonding the contaminants to the at least one media.

80. Filtered water made by the process of:

- (a) connecting a filter assembly to a faucet assembly;
- (b) supplying water to the faucet assembly;
- (c) diverting the water into the filter assembly;
- (d) passing the water out of the filter assembly into a spray attachment having a nozzle; and
- (e) exiting the water through the nozzle.

81 Filtered water made by the process of Claim 80, further comprising dispersing the water through at least one media disposed within the filter assembly.

82. Filtered water made by the process of Claim 81, further comprising removing contaminants from the water by bonding the contaminants to the at least one media.

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